

General Biographical Sketches for the Science and Technology Review Panel

(January 22, 2003)

1. Introductory Note

The persons below have been selected from among the US Environmental Protection Agency's Science Advisory Board membership to be participants on the panel that will review the EPA's FY 2004 Science and Technology Budget. The charge questions that the panel will respond to are posted on this website as well. The panel membership was drawn largely from the EPA SAB's Research Strategies Advisory Committee, a committee primarily established to review the EPA Science and Technology Budget. Additional Panel members were drawn from the SAB membership to fill in missing expertise and to add additional perspectives to the Panel.

As noted in 67 FR 79912 (December 31, 2002) this list was posted to solicit public comments on the panel. Comments will be taken until January 21, 2003 (extended by one day because of the Martin Luther King, Jr. Holiday). No comments were received by the due date, though one member of the public did call with questions about the review.

On January 23, 2003, the Panel will meet by teleconference to receive informational briefings on the EPA Science and Technology program and to complete SAB plans for the budget review. The teleconference will begin at 12:00 noon and end by 3:00 pm. A second conference call meeting will continue this briefing on January 24, 2003 (12:00 noon to 3:00 pm). The face-to-face meeting to receive briefings on the FY 2004 budget request itself, and for the panel to deliberate and draft its report, will be on February 24-25, 2003 in Washington, DC. The location of this meeting will be published in the Federal Register and on this website.

2. Panelists

CHAIR

Dr. Genevieve Matanoski

Dr. Matanoski is a Professor of Epidemiology at the Johns Hopkins University School of Hygiene and Public Health in Baltimore, MD. For a time after medical school she pursued a career in pediatrics and general preventive medicine. After earning a Doctor of Public Health Degree, she was appointed to the faculty of Johns Hopkins University and has been a professor since 1976. In addition to teaching and research, Dr. Matanoski has had appointments in a number of teaching and training programs in the U.S. and abroad and is a frequent advisor to legislative and policy-making groups. She is a member of several scientific advisory bodies both for governmental agencies and for industry. She is a past Chair of the EPA Science Advisory Board, as well as a past Chair of the SAB Radiation Advisory Committee. She now serves as Chair of the Committee. During her tenure on the EPA SAB, Dr. Matanoski was involved in the writing of several documents produced by the SAB to provide advice to EPA including the

Beyond the Horizon: Using Foresight to Protect the Environmental Future document and the Integrated Risk Project report Toward Integrated Environmental Decision-making, and was Chair of the latter Committee. She is the author or co-author of over 80 publications.

Dr. Matanoski's work has focused on the epidemiology of cancer, including bladder, lung, skin and uterine cancers, and leukemia. Her research studies have examined the risks associated with

occupational and environmental exposures to such agents as radiation, electromagnetic fields, and chemical substances as styrene, butadiene, arsenic and environmental tobacco smoke. Recent research has emphasized reproductive effects and congenital malformations from environmental exposures. Her early work involved infectious diseases and illnesses in infants and children. Dr. Matanoski received a BA degree in chemistry at Radcliffe College and a MD at the Johns Hopkins School of Medicine. She also earned a Doctor of Public Health Degree from the Johns Hopkins University School of Hygiene and Public Health.

MEMBERS

Dr. William Adams

Dr. Adams is currently Principal Environmental Scientist for Rio Tinto. He was previously Director of Environmental Science for six years at Kennecott Utah Copper, Salt Lake City, Utah. Dr. Adams responsibilities include managing product stewardship programs, environmental research, ecological risk assessments and interface with regulators on science-based issues. Recent research interests include developing ecotoxicology risk assessment methods for metals, site-specific methodologies for water quality criteria for metals, and development of an alternative strategy for metals to replace the existing PBT (persistent, toxicity and bioaccumulation) approach. Dr. Adams has published several papers on methods for assessing sediments and was instrumental in developing the science supporting equilibrium partitioning theory (EqP) for non-polar organic substances. He has also published several papers in the area of water quality assessments and has a total of 65 papers in these areas as well as several books and/or book chapters. Dr. Adams served on the EPA SAB Ecological Processes and Effects Committee for 8 years and on several other SAB subcommittees. Additionally, he has served on the National Marine Board committees reviewing sediment assessment approaches. Dr. Adams also serves on the EPA Superfund National Advisory Committee for Environmental Policy and Technology (NACEPT). Additionally, he has served on numerous technical peer review committees and technical workshop committees. Outside of RSAC, there have been no other S-T reviews performed by Dr. Adams. Dr. Adams received his B.S. in Biological Sciences (cum laude) in 1969 from the Lake Superior State University in Sault Ste Marie, MI. He received his M.S. in Wildlife Toxicology in 1971 from the Michigan State University, E. Lansing, MI and his Ph.D. in Aquatic Toxicology in 1976 from the Michigan State University in East Lansing, MI. He receives no grant and/or contract support.

Dr. Richard Bull

Dr. Bull is presently employed one-half time as a Professor of Environmental Sciences at Washington State University (Tri-Cities Campus) and also works as a consultant in toxicology through a sole proprietorship company (MoBull Consulting). Dr. Bull has specialized in the toxicology of and risk assessment for chemicals commonly found in drinking water. He was employed by the Environmental Protection Agency in the period 1971-1984. His last position was as Director of the Toxicology and Microbiology Division of the Health Effects Research Laboratory in Cincinnati where he managed the Health Effects Research Programs under the Safe Drinking Water Act and under the Clean Water Act for the Agency. Personal research interests were in the effects of lead on brain development and the mutagenic and carcinogenic effects of disinfection by-products. In 1984 he accepted a position with Washington State University where he taught pharmacology and toxicology. His research in the toxicology and carcinogenicity of chemicals that were contaminants or additives to drinking water continued. The National Institute of Environmental Health, the United States Air Force, the U.S. Environmental Protection Agency, NASA, the American Water Works Association, and the National Water Research Institute supported his research. The research focused largely upon the haloacetic acid by-products of chlorination and metabolites of trichloroethylene. In 1994, Dr. Bull accepted an appointment as Senior Scientist at Pacific Northwest National Laboratory (managed by Battelle) where he

remained until May of 2000. His research continued to be supported by the institutions identified above, plus projects that were funded by the U.S. Department of Energy and the Strategic Environmental Research and Development Program (SERDP) of the Department of Defense. This support focused largely upon the carcinogenic activity of trichloroethylene and other chlorinated solvents. He also was instrumental in bringing projects utilizing cDNA arrays to study the changes in gene expression that occur after exposure to endocrine disrupting compounds (funded by the Institute of Environmental Health Sciences of Japan) and a subcontract with Battelle on a support contract for the National Center for Environmental Assessment of the U.S. Environmental Protection Agency. These projects have expired. His activities at Washington State University are supported by a grant from the Department of Energy's Low Dose and Low Dose Rate Radiation Effects Program. Through MoBull, a contract with the American Water Works Association Research Foundation (AwwaRF) is in the final stages of negotiation and should begin in Jan, 2003). Dr. Bull's consulting involves a series of small consulting agreements. Agreements include contracts through engineering firms, universities or directly with utilities (e.g. Clayton County, GA, Tampa, West Basin Municipal Water District, National University of Singapore, the Federal District of Mexico, Australian Cooperative Research Centre for Water Quality and Treatment and the Victorian Consortium for Public Health [Monash University], Generale des Eaux, Paris, and East Bay Municipal Water District in Oakland). Much of this work deals with identifying chemical hazards that might be associated with the potable reuse of wastewater. In addition, he recently wrote an informational paper for the National Rural Water Association on the concept of thresholds. He has also served as a consultant to attorneys related to litigation surrounding drinking water contamination. However, this work does not involve the giving of expert testimony. Dr. Bull has also been involved in a variety of scientific reviews associated with specific environmental contaminants. In recent years, he chaired the NRC review of Copper in Drinking Water, the EPA SAB Drinking Water Committee's review of the Proposed Drinking Water Standard for arsenic and served on the Arsenic Rule Benefits subcommittee for the U.S. EPA's Science Advisory Board. At the behest of the National Center of Environmental Assessment of EPA, Dr. Bull published a review of potential modes of action through which trichloroethylene might produce liver cancer. He also serves on the Science Advisory Panel for the Santa Ana River Water Quality and Health Study in Orange County California and has worked with Orange County in seeking Federal Support for their research activities directed at determining processes that are effective in allowing indirect potable reuse of wastewater. He currently is the chair of the NRC Subcommittee on Assessing Toxicological Risks to Deployed Military Personnel. In more distant past he has participated in a variety of additional reviews that have been conducted by the National Research Council, the Science Advisory Board, the Science Advisory Panel of EPA, the World Health Organization, and the International Agency for Research on Cancer (IARC) that are a matter of public record.

Dr. Robin Cantor

Dr. Robin Cantor is a Principal and Managing Director of LECG, LLC, a private consulting firm providing economic and financial analysis to a broad range of public and private enterprises. Dr. Cantor also has a faculty appointment in the Part-time Program in Engineering of the Johns Hopkins University. Since October 2001, she has been a member of the Research Strategies Advisory Committee of the EPA Science Advisory Board.

Dr. Cantor's areas of expertise include environmental and energy economics, statistics, risk management, public policy and societal decision making. She has conducted research in many issues related to environmental economics including analysis of Canadian and US nuclear policies, recycling and waste management economics, environmental externalities associated with different fuel cycles and energy technologies, private sector responses to global warming, electric power plant cost estimation and planning, auction behaviors and demand side management programs, possibilities for cost-sharing arrangements between local jurisdictions and other government agencies to clean up hazardous waste

sites, social and individual valuations of non-marketed goods, and consumer and industrial product prices in the context of anti-trust and other complex litigation. Dr. Cantor has submitted analysis, testimony and affidavits in federal and state proceedings and Congressional hearings. Her publications include refereed journal articles, book chapters, expert reports, reports for federal sponsors, and a co-authored book on economic exchange under alternative institutional and resource conditions.

Dr. Cantor is Past President of the Society for Risk Analysis. From 1991 to 1996, she was Program Director for Decision, Risk, and Management Sciences, a research program of the National Science Foundation. While at NSF, she was also a Coordinator for the NSF Human Dimensions of Global Change, the NSF Methods and Models for Integrated Assessment, and the NSF/EPA Decision Making and Valuation for Environmental Policy. From 1982 until 1991, Dr. Cantor was a senior researcher at Oak Ridge National Laboratory. Dr. Cantor has a B.S. in mathematics from Indiana University of Pennsylvania and a Ph.D. in economics from Duke University.

Dr. Domenico Grasso

Domenico Grasso is the Rosemary Bradford Hewlett Professor and Founding Chair of the Picker Engineering Program at Smith College and holds adjunct faculty appointments at the Universities of Connecticut and Massachusetts and Yale University. He is an environmental engineer who studies the ultimate fate of contaminants in the environment and develops new techniques to destroy or otherwise reduce the risks associated with these contaminants to human health or natural resources, he focuses on molecular scale processes that underlie nature and behavior of contaminants in environmental systems.

Dr. Grasso holds a B.Sc. from Worcester Polytechnic Institute, an M.S. from Purdue University and a Ph.D. from The University of Michigan. He is a registered Professional Engineer in the states of Connecticut and Texas, and was Professor and Head of Department in Civil & Environmental Engineering at the University of Connecticut prior to joining Smith. He has been a Visiting Scholar at UC-Berkeley, a NATO Fellow, and an Invited Technical Expert to the United Nations Industrial Development Organization in Vienna Austria. He is currently a member of the United States Environmental Protection Agency Science Advisory Board, Past-President of the Association of Environmental Engineering & Science Professors, and Editor-in-Chief of Environmental Engineering Science. He has authored more than 100 technical papers & reports, including four chapters and two books. Federal, state and industrial organizations have supported his research work. (1/2003). Currently, he holds a research grant from the US Department of Agriculture.

Dr. Philip Hopke

Dr. Hopke, is the Bayard D. Clarkson Distinguished Professor at Clarkson University. Professor Hopke is an Associate Editor of Chemometrics and Intelligent Laboratory Systems. In October 1997, he was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board (SAB). Dr. Hopke is presently Chair of the CASAC, and he also chairs the CASAC Subcommittee on Particle Monitoring. In addition, he serves on both the SAB's Executive Committee and the Research Strategies Advisory Committee. Professor Hopke is a member of the National Research Council's Congressionally-mandated Committee on Research Priorities for Airborne Particulate Matter and the Committee on Air Quality Management in the United States. He has previously served on five other NRC committees.

Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T., he spent four years as an assistant professor at the State University College at Fredonia, NY. Dr. Hopke then joined the University of Illinois at Urbana-Champaign, and subsequently came to Clarkson in 1989

as the Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He has served as Dean of the Graduate School, Chair of the Department of Chemistry, and Head of the Division of Chemical and Physical Sciences before moving to the Department of Chemical Engineering in 2000.

Dr. Hilary Inyang

Dr. Hilary I. Inyang is the Duke Energy Distinguished Professor of Environmental Engineering and Science, Professor of Earth Science and Director of the Global Institute for Energy and Environmental Systems at the University of North Carolina-Charlotte. Prior to his current position, he was University Professor, Dupont Young Professor and Director of the Center for Environmental Engineering, Science and Technology (CEEST) at the University of Massachusetts, Lowell. From 1997 to 2001, Dr. Inyang served as the chair of the Environmental Engineering Committee of USEPA's Science Advisory Board. He is a member of the National Advisory Council on Environmental Policy and Technology (Effluent Guidelines Committee) and has served on more than sixty international, national and state science/engineering panels and committees. He is currently the elected president of the newly-formed International Society of Environmental Geotechnology and has co-chaired several international conferences in the US, Brazil, China, Canada and Japan since 1995. Dr. Inyang is a former AAAS/USEPA Environmental Science and Engineering Fellow, National Research Council Young Investigator (1997) and Eisenhower Fellow of the World Affairs Council (1992/93).

Dr. Inyang's research and allied professional activities have focused on waste containment systems, contaminant leachability, soil/contaminant physico-chemical interactions, natural disaster mitigation techniques, rock fragmentation techniques for energy installations and underground space, and energy / environmental policy. He has authored/co-authored several research articles, book chapters, federal design manuals and the textbook *Geoenvironmental Engineering: principles and applications*, published by Marcel Dekker. He is an associate editor / editorial board member of eight refereed international journals and contributing editor of three books, including the United Nations Encyclopedia of Life Support Systems (Environmental Monitoring Section). Dr. Inyang holds a Ph.D. in geotechnical engineering and materials, with a minor in mineral resources, from Iowa State University.

Dr. George Lambert

Dr. Lambert is an Associate Professor of Pediatrics and Associate Director of the Clinical Research Center at the UMDNJ-Robert Wood Johnson Medical School. He holds a MD degree from the University of Illinois and has had post graduate training in: Clinical Research in Neonatology, has been an Intern and Resident at the Harriett Lane Home, Johns Hopkins Hospital, Baltimore, Md, He was also a Pharmacology Fellow at Children's Hospital of Philadelphia, PA. Dr. Lambert is certified by the American Board of Pediatrics, 1979 & 1980; Neonatal/Perinatal Medicine, 1980 and as an Instructor, Neonatal Resuscitation, 1989

Dr. Lambert is a member of the Environmental and Occupational Health Sciences Institute (EOHSI), UMDNJ-Robert Wood Johnson Medical School and an Adjunct Associate Professor of Pharmacy in the College of Pharmacy of Rutgers, The State University of New Jersey. He is also a member of the Cancer Institute of New Jersey, and Director of the Center for Child and Reproductive Environmental Health, Director, NIH / USEPA Center for Childhood Neurotoxicology and Exposure Assessment, and the Director, Pediatric Clinical Research Center, UMDNJ- Robert Wood Johnson Medical School.

Dr. Lambert has served as a consulting expert to a number of professional and governmental organizations including: the Neuropharmacology Division of FDA, the U.S. Congress, TSCA Interagency Testing Committee, Department of Energy, Oakridge National Laboratory, Division of Chemical

Assessment, Office of Orphan Products Development, FDA; NICHD's National Neonatal Collaborative Project. He is a Member, Committee on Drugs, American Academy of Pediatrics, (National Committee), a Member - Human Health Effects Committee of the Joint (U.S. and Canadian) Commission on the Great Lakes, a consultant to the World Health Organization, Environmental Toxicology in Children. He has served on a number of US EPA Science Advisory Board panels including the Dioxin Reassessment Panel. Dr. Lambert is a Fellow of the American Academy of Pediatrics

Dr. Lambert's grants include: Since 1998: New York Health Department NIEHS Award; NIEHS/US EPA Superfund Center, Co-Investigator - Mohawk Project; NIEHS Center of Excellence (M. Gallo, PI); NIEHS training Grant in Toxicology (K Reuhl, PI); US EPA - Effect of in utero exposure to PCB's on Sexual Maturation NJ DHHS / CDC - Hypospadias and Xenoestrogen exposure in humans; NIEHS- Pharmacogenetics of environmental chemical related toxicities (JY Hung, PI); Cancer Commission of New Jersey Effects of Herbal products on sex hormone synthesis and metabolism; NJ Department of Environmental Protection Effects of Eating Newark crabs on human health; NIEHS / USEPA Children Center for Environmental Health and Disease Prevention- Center for Childhood Neurotoxicology and Exposure Assessment; NCI Program Project: Tea Cancer Chemoprevention (PI CS Yang); NIEHS The Effects of World Trade Center on human health (PI M. Gallo --Dr Lambert's Project: The effects of WTC on Reproductive Outcome.)

Dr. Maria Morandi

Dr. Morandi is an Assistant Professor of Environmental Sciences and Occupational Health at the School of Public Health of the University of Texas Houston Health Science Center. She served as member of the Integrated Human Exposure Assessment Committee (formerly the Indoor Air and Total Human Exposure Assessment Committee) of the EPA Science Advisory Board during 1992 and 1998, and has served as a member of the Research Strategies Advisory Committee since 1998. Dr. Morandi has also served as member or chair of several EPA program review panels, the Agency for Toxic Substances Board of Scientific Councilors, and the National Institute of Occupational Health Study Section. .

Dr. Morandi's areas of research interest include development of sampling and analytical methods for indoor, outdoor and personal monitoring of air pollutants in community and work environments, exposure assessment, exposure modeling, and health effects from exposure to airborne contaminants and related cellular and molecular mechanisms of action. Dr. Morandi received a BS degree in Chemistry from the City College of New York in 1978. She received M.S. and Ph.D. degrees in Environmental Health from the Norton Nelson Institute of Environmental Medicine of New York University Medical Center in 1982 and 1985. She is also certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.

Dr. James Watson, Jr.

Dr. James E. Watson, Jr. is a Professor Emeritus in the Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill. His principal research interests relate to environmental radioactivity and radioactive waste management. He has conducted numerous studies of radon, both indoors and in water. He received the University's Underwood and McGavran Awards for excellence in teaching and the Greenberg Alumni Endowment Award for excellence in teaching, research, and service.

He is a past president of the Health Physics Society, the national radiation safety society, and a past chairman of the Radiological Health Section of the American Public Health Association. He has served as a National Lecturer for Sigma Xi, on National Academy of Sciences committees studying radioactive waste management, on the Centers for Disease Control and Prevention's Advisory Committee

for Energy-Related Epidemiologic Research, as chairman of the Environmental Protection Agency's Radiation Advisory Committee, and as chairman of the North Carolina Radiation Protection Commission. Dr. Watson receives no research funding. He received his undergraduate education in nuclear engineering at North Carolina State University. He holds a M.S. degree in Physics from North Carolina State University and a Ph.D. in Environmental Sciences and Engineering from the University of North Carolina at Chapel Hill.

Dr. Lauren Zeise

Dr. Lauren Zeise is Chief of Reproductive and Cancer Hazard Assessment within the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment. She came to state service in 1988 and has served in that position since 1991. In that position she oversees a variety of the state's cancer, reproductive and ecological risk assessment activities. Her group evaluates and provides advice on cancer, reproductive and ecological risks posed by environmental contaminants, and develops policy guidance for conducting such assessments. The group also conducts scientific evaluations mandated by Proposition 65 and evaluates the risks from use of drugs, cosmetics, gasoline and other products. It is also developing the state's guidance on evaluating risks stemming from the exposure of the young to carcinogens. She chaired California's Comparative Risk Project Human Health Committee, and oversaw the external review of the State's risk assessment practices, policies and guidelines. She has authored over 200 reports on environmental health risks for the State of California. Dr. Zeise has been involved in the evaluation and review of a variety of risk assessment issues.

Dr. Zeise has served on various committees of the EPA's Science Advisory Board (SAB), National Institute of Medicine, National Research Council (NRC), National Toxicology Program's Board of Scientific Counselors, the NRC Board of Environmental Science and Technology, and the former Office of Technology Assessment. She served on the EPA Board of Scientific Counselor's subcommittee reviewing PM research. Currently she serves on the SAB Research Strategies Advisory Committee, NRC Committee on Air Quality Management in the United States, NRC Committee on Toxicology, NRC Committee on EPA Star Grants Program, IOM Committee on Assessment of Wartime Exposure to Herbicides in Vietnam, the IOM Board on Health Promotion and Disease Prevention, and EPA FQPA Science Review Board. She is a member and fellow of the Society of Risk Analysis and is on the editorial board for that society's journal. The National Cancer Institute Smoking and Tobacco Smoke Monograph Health Effects of Environmental Tobacco Smoke was conceived and developed under her editorial direction. She is coauthor of the recently released International Agency for Research on Cancer monograph Quantitative Estimation and Prediction of Cancer Risk. Her research has focused on cancer risk assessment methodology and applications. All research funding is from her employer. She received her doctorate from Harvard University in 1984.

Notes on Changes:

1. Dr. Steven Bartell withdrew because of scheduling conflicts.
2. Dr. George Lambert was added to increase the expertise in medical sciences and children's health.
3. Dr. Grasso was added to increase the expertise in environmental engineering.
4. Dr. Morandi, a member of the SAB Research Strategies Advisory Committee, was added because of a change in her availability and the need for added expertise in exposure related issues.